CLAIMS

What is claimed is:

1. A tunneler, comprising:

a tip containing gripping means; and

a plurality of flexible shaft members extending from the tip, the plurality of shaft members having dissimilar lengths.

2. The tunneler of claim 1, wherein each shaft member contains means for retaining the shaft member in the lumen of a catheter.

3. The tunneler of claim 2, wherein the retaining means comprises a protrusion on the shaft member.

4. The tunneler of claim 1, wherein the difference in the lengths of the shaft member ranges up to about 20 %.

5. A tunneling system, comprising:

a tip containing gripping means; and

a plurality of flexible shaft members extending from the tip, the plurality of shaft members having dissimilar lengths.

6. The system of claim 5, wherein each shaft member contains means for retaining the shaft member in the lumen of a catheter.

7. The system of claim 6, wherein the retaining means comprises a protrusion on the shaft member.

8. The system of claim 7, wherein the difference in the lengths of the shaft member ranges up to about 20 %.

9. The system of claim 6, further comprising a shaft that is removably connected to the tip.

10. The system of claim 9, further comprising a sheath the covers the portion of the tip and sheath that are connected.

11. The system of claim 10, wherein the sheath contains first means for retaining the sheath on the tip and second means for retaining the sheath on the shaft.

12. The system of claim 11, wherein the first retaining means comprises a retaining ring.

13. The system of claim 12, wherein the first retaining means complements the protrusion on a shaft member.

14. The system of claim 5, wherein only one shaft member contains means for retaining the shaft member in the lumen of a catheter.

15. A tunneling system, comprising:

a tip containing gripping means and a plurality of flexible shaft members extending therefrom, the plurality of shaft members having dissimilar lengths;

a shaft removable connected to the tip; and

a sheath covering the portion of the tip and sheath that are connected.

16. The system of claim 15, wherein each shaft member contains a protrusion thereon.

17. The system of claim 16, wherein the sheath contains first means for retaining the sheath on the tip and second means for retaining the sheath on the shaft.

18. The system of claim 17, wherein the first retaining means comprises a retaining ring.

19. The system of claim 18, wherein the first retaining means complements the protrusion on a shaft member.

20. The system of claim 15, wherein only one shaft member contains a protrusion thereon.

21. A medical device, comprising:

a multi-lumen catheter; and

a tunneler with a tip containing gripping means and a plurality of flexible shaft members extending therefrom, the plurality of shaft members having dissimilar lengths.

22. A method for connecting a tunneler and a catheter, the method comprising:

providing a tunneler with a tip containing gripping means and a plurality of flexible shaft members extending therefrom, the plurality of shaft members having dissimilar lengths;

providing a multi-lumen catheter; and

inserting the plurality of shaft members into the lumens of the catheter.

23. The method of claim 22, including providing each shaft member with means for retaining the shaft member in the lumen of the catheter.

24. A method for inserting a catheter in the body, the method comprising:

providing a tunneler with a tip containing gripping means and a plurality of flexible shaft members extending therefrom, the plurality of shaft members having dissimilar lengths;

providing a multi-lumen catheter;

inserting the plurality of shaft members into the lumens of the catheter;

pulling the tunneler through a pair of incisions in the body; and

detaching the tunneler from the catheter.

25. A method for creating a tunnel in a patient, the method comprising:

providing a tunneler with a tip containing gripping means and a plurality of flexible shaft members extending therefrom, the plurality of shaft members having dissimilar lengths;

providing a multi-lumen catheter;

inserting the plurality of shaft members into the lumens of the catheter;

pulling the tunneler through a pair of incisions in the body; and

detaching the tunneler from the catheter.